

# Solis-(80-100)K-5G, Solis-(100-110)K-HV-5G Solis-136K-EHV-5G

Solis 5G Three Phase Inverters



## Features:

- ▶ Over 99% Max. efficiency
- ▶ Wide voltage range and low startup voltage
- ▶ 9/10 MPPT design with precise MPPT algorithm
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, single transformer can connect 6M+ in parallel
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundancy fan
- ▶ Strings intelligent monitoring, Smart I-V Curve Diagnosis supported
- ▶ Fuse free design to avoid fire hazard
- ▶ Type II surge arrester for both DC and AC, type I surge arrestor optional
- ▶ Intelligent redundancy fan
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Optional anti-PID function integrated
- ▶ Integrated AC & DC disconnect switches



## Model:

400V: Solis-80K-5G      Solis-100K-5G

480V: Solis-100K-HV-5G

540V: Solis-110K-HV-5G   Solis-136K-EHV-5G

## Datasheet

| Model Name  | Solis-80K-5G                                       | Solis-100K-5G | Solis-100K-HV-5G  | Solis-110K-HV-5G | Solis-136K-EHV-5G |
|---|--|---------------|---|------------------|-------------------|
| <b>Input DC</b>                                   |  |               |   |                  |                   |
| Max. input power                                  | 126kW  | 140kW         | 140kW   | 140kW            | 140kW             |
| Max. input voltage                                |  |               | 1100V   |                  |                   |
| Rated voltage                                     | 600V   |               |   | 720V             |                   |
| Start-up voltage                                  |  |               | 195V  |                  |                   |
| MPPT voltage range                                |  |               | 180-1000V   |                  |                   |
| Max. input current                                | 9*26A  |               |   | 10*26A           |                   |
| Max. Short Circuit current                        | 9*40A  |               |   | 10*40A           |                   |
| MPPT number/Max. input strings number             | 9/18   |               |   | 10/20            |                   |
| <b>Output AC</b>                                  |  |               |   |                  |                   |
| Rated output power                                | 80kW   | 100kW         | 100kW   | 110kW            | 136kW             |
| Max. apparent output power                        | 88kVA  | 110kVA        | 110kVA  | 121kVA           | 136kVA            |
| Max. output power                                 | 88kW   | 110kW         | 110kW   | 121kW            | 136kW             |
| Rated grid voltage                                | 3/N/PE, 220/380V, 230/400V                         |               | 3/PE, 480V  |                  | 3/PE, 540V        |
| Rated grid frequency                              |  |               | 50Hz/60Hz   |                  |                   |
| Rated grid output current                         | 121.6A/115.5A                                      | 152.0A/144.3A | 120.3A  | 117.6A           | 145.4A            |
| Max. output current                               | 133.7A   | 167.1A        | 132.3A  | 129.4A           | 145.4A            |
| Power Factor                                      | >0.99 (Adjustable from 0.8 leading to 0.8 lagging) |               |   |                  |                   |
| THDi  | <3%  |               |   |                  |                   |
| <b>Efficiency</b>                                 |  |               |   |                  |                   |
| Max. efficiency                                   | 98.7%  |               |   | 99.0%            |                   |
| EU efficiency                                     | 98.3%  |               |   | 98.5%            |                   |
| <b>Protection</b>                                 |  |               |   |                  |                   |
| DC reverse-polarity protection                    |  |               | Yes   |                  |                   |
| Short circuit protection                          |  |               | Yes   |                  |                   |
| Output over current protection                    |  |               | Yes   |                  |                   |
| Surge protection (DC/AC)                          |  |               | Type II/Type II (Type I optional)   |                  |                   |
| Grid monitoring                                   |  |               | Yes   |                  |                   |
| Islanding protection                              |  |               | Yes   |                  |                   |
| Temperature protection                            |  |               | Yes   |                  |                   |
| Strings monitoring                                |  |               | Yes   |                  |                   |
| I/V Curve scanning                                |  |               | Yes   |                  |                   |
| Anti-PID function                                 |  |               | Optional  |                  |                   |
| Integrated AFCI (DC arc-fault circuit protection) |  |               | Optional  |                  |                   |
| Integrated DC switch                              |  |               | Yes   |                  |                   |
| Integrated AC switch                              |  |               | Optional  |                  |                   |
| <b>General Data</b>                               |  |               |   |                  |                   |
| Dimensions (W*H*D)                                |  |               | 1050mm*567mm*314.5mm  |                  |                   |
| Weight  |  |               | 82kg  |                  |                   |
| Topology  |  |               | Transformerless   |                  |                   |
| Self consumption                                  |  |               | <2W (Night)   |                  |                   |
| Operating ambient temperature range               |  |               | -25~60°C  |                  |                   |
| Relative humidity                                 |  |               | 0~100%  |                  |                   |
| Ingress protection                                |  |               | IP66  |                  |                   |
| Cooling concept                                   |  |               | Intelligent redundant fan-cooling   |                  |                   |
| Max. operation altitude                           |  |               | 4000m   |                  |                   |
| Grid connection standard                          |  |               | VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC61727, DEWA |                  |                   |
| Safety/EMC standard                               |  |               | IEC 62109-1/-2, IEC62116 & EN 61000-6-2/-4  |                  |                   |
| <b>Features</b>                                   |  |               |   |                  |                   |
| DC connection                                     |  |               | MC4   |                  |                   |
| AC connection                                     |  |               | OT Terminal connectors  |                  |                   |
| Display   |  |               | LCD, 2x20 Z.  |                  |                   |
| Communication                                     |  |               | RS485; WiFi/GPRS/PLC (optional)   |                  |                   |